



## Review

# Values and value conflicts in snack providing of Dutch, Polish, Indonesian and Italian mothers

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## ABSTRACT

This study investigates which values play a role in the decision of mothers about snacks to offer to their young children with a focus on the value conflicts that might occur. The study explores whether national culture is reflected in mothers' values in snack choice for their young children and the related value conflicts. Semi-structured interviews with 67 mothers of 2–7 years old children divided over 4 national cultures (Dutch, Polish, Indonesian and Italian) were conducted. Questions were asked about their values and value conflicts when providing a snack to their young children. Four key themes could be distinguished to cluster the mentioned values. The health-related key theme includes all values that are associated with the healthiness of the product, the child-related key theme all values that connects to the child, the time-related key theme includes the value convenience and the product-related key theme includes all values that are associated with the product itself. Dutch and Polish mothers mostly valued health of the snack, whereas Indonesian and Italian mothers mostly valued the preference of their child. Data also shows specific prevalence between values and nationalities: convenience was very important for Dutch mothers, valuing organic food was typical for Polish mothers, religion played a role for Indonesian mothers, while Italian mothers placed more value on brand compared to the mothers of other cultures. In all cultures, the value conflicts mentioned were mainly related to health.

## 1. Introduction

Over the last decades, rates in childhood obesity have been on the rise (Lobstein & Frelut, 2003; Ogden, Carroll, Kit, & Flegal, 2014; Wijnhoven et al., 2014). Worldwide, around 42 million children are overweight (Ng et al., 2014). Childhood obesity tracks into adulthood (Singh, Mulder, Twisk, Van Mechelen, & Chinapaw, 2008; Nicklaus, 2016) and can cause health problems later in life (Reilly & Kelly, 2011; Tyson & Frank, 2018). The consumption of energy-dense snacks by children, which is a frequently occurring habit (Larson & Story, 2013; Gevers, Kremers, de Vries, & van Assema, 2016), is one of the factors contributing to childhood obesity (Piernas & Popkin, 2010; Boots, Tiggemann, Corsini, & Mattiske, 2015). Just like obesity, children's dietary behavior tracks into adulthood (Mikkilä, Räsänen, Raitakari, Pietinen, & Viikari, 2005; Craigie, Lake, Kelly, Adamson, & Mathers, 2011). Therefore, knowing how the snacks are chosen is important.

Mothers play a crucial role in the development of children's dietary

behavior (Holsten, Deatrick, Kumanyika, Pinto-Martin, & Compher, 2012; Hardcastle & Blake, 2016). Mother's choices are critical especially for young children who get snacks directly from their caregivers (Tiggemann & Lowes, 2002), which are often the mothers (Rosenkranz & Dziewaltowski, 2008; Walsh, Meagher-Stewart, & MacDonald, 2015). Because mothers want to make the best choices for their children, they sometimes experience struggles (Johnson, Sharkey, Dean, Alex McIntosh, & Kubena, 2011; Machín, Giménez, Curutchet, Martínez, & Ares, 2016; Fielding-Singh, 2017). Besides, mothers prefer to make healthy food choices for their children (Carnell, Cooke, Cheng, Robbins, & Wardle, 2011; Walsh et al., 2015), as well as food choices their children prefer (Carnell et al., 2011; Boak et al., 2016; Wijtzes et al., 2017), two considerations which often become in conflict (Luomala, Laaksonen, & Leipamaa, 2004). Connors, Bisogni, Sobal, and Devine (2001) labelled the considerations people take into account when making food choice decisions as values. Mothers have to deal with multiple of these values when choosing a snack for their children. When

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these food-related values do not serve the same goal, value conflicts occur (Furst, Connors, Bisogni, Sobal, & Falk, 1996; Connors et al., 2001), and a discrepancy can arise between what mothers would like to provide as a snack and what they actually provide (Hayter et al., 2015). Therefore, crucial questions are if mothers from different cultures have the same values in snack providing, if they perceive similar value conflicts, and whether cultural differences influence these values and value conflicts.

Hofstede, Hofstede, and Minkov (2010) defined culture as the whole of all the unwritten rules shared within a society, which are taught to new generations. According to Axelson (1986), culture indicates a certain way people act, feel and think and when this is connected to food, he coined the word 'foodways'. Foodways include the determination of what is edible but also all the activities that involve food selection and consumption. The cultural background of a person sets the scene during the choice, preparation, and consumption of food products (Counihan & Van Esterik, 2012). Various aspects of culture can affect food choice, food behavior and food consumption, like traditions and rituals social organizations, table manners, and meaning of food in life (Rozin, 2006). Culture is one of the most important parameters influencing food choice (Osinga & Hofstede, 2004; Rozin, 2006; De Mooij, 2010) and this food choice is passed from one generation to the other (Aboud, 2011; Hofstede et al., 2010). Moreover, culture plays a role in value negotiations in a person's food choice process (Connors et al., 2001; Bisogni, Connors, Devine, & Sobal, 2002). Therefore, mothers' culture is expected to play a role in mothers' snack choice behavior for their children as well.

Multiple studies investigated the influence of culture on food choice (e.g. Michaelidou, Christodoulides, & Torova, 2012; Freedman, 2016; Pelly, Burkhart, & Dunn, 2018), whereby the quantitative Food Choice Questionnaire (FCQ) has been widely applied to compare food choices in different cultures (e.g. Prescott, Young, O'Neill, Yau, & Stevens, 2002; Mardon et al., 2015; Pearcey & Zhan, 2018). However, in a review by Cunha, Cabral, Moura, and de Almeida (2018) on comparing cultures using the FCQ, they concluded that for comparing cultures the original set of items of the questionnaire, which are derived from only one specific culture (UK), should be adapted to accommodate the different cultures.

A well-acknowledged model for characterizing cultures on national level is the cultural dimensions model of Hofstede et al. (2010). This model has been widely used to explain differences in organizations and other spheres of life (Hofstede et al., 2010). De Mooij (2010) applied and validated the model to (food) consumption-related values and motives.

The provision of snacks to children is a recurrent occasion in which the cultural dimensions and the mothers universal value of caring for their children's health are important. In the current study, we define

snacks as all foods, either healthy or unhealthy, eaten in between the regular meals. The main aim is to explore which values matter to mothers in snack choice for their young children, and whether they experience value conflicts. Additionally, we explore cross-cultural differences in these values and value conflicts. The insights obtained from this study point to the relevance of culture specific interventions to help mothers to meet children's dietary requirements.

## 2. Method

### 2.1. Study design

In total, 17 Dutch mothers, 16 Polish mothers, 17 Indonesian mothers and 17 Italian mothers, all with at least one child aged 2–7 years were selected to participate in the study. Semi-structured interviews with the mothers were used to explore their values and experienced value conflicts, when providing a snack to their young children. Interviews were digitally recorded and lasted about 45 min. An interview schedule with fixed topics (e.g. personal information of the mothers, consumption of snacks: when, how and where, preferences of the child, features and properties of the ideal snack, difficult moments in snack providing) was developed and used to maintain consistency in interviewing. Interviews were conducted in English, when the researcher and participant had a different mother tongue. If both researcher and participant had the same native language, the interview was conducted in that language. Interviews were held either at the participant's home or at the university depending on the preference of the participant. The research was piloted with four mothers of children in the targeted age group, in order to determine any flaws related to time, feasibility and sensitiveness of the topic.

### 2.2. Recruitment and selection of participants

The Netherlands, Poland, Italy and Indonesia were chosen because of their differences on Hofstede's cultural model and its six dimensions. The country scores ([www.geerthofstede.com/research-and-vsm/dimension-data-matrix](http://www.geerthofstede.com/research-and-vsm/dimension-data-matrix), April 2018) on Hofstede's 6 dimensions are presented in Table 1.

Mothers from these four different countries were approached through community organizations, cultural societies, social media and primary schools. A non-probabilistic, snowball sampling method was followed. The data was collected in the Netherlands and in Italy. As the Indonesian and Polish mothers lived in the Netherlands, an extra inclusion criterion was that these mothers did still stick to the eating culture and traditions of the native country. When recruiting the mothers, they were asked if they had the opinion they still did so, if this was the case they could participate in the study.

**Table 1**  
Hofstede dimension scores, per country ([www.geerthofstede.com/research-and-vsm/dimension-data-matrix](http://www.geerthofstede.com/research-and-vsm/dimension-data-matrix), April 2018).

	Dutch	Indonesian	Polish	Italian
Power distance <sup>a</sup>	38	<b>68</b>	<b>78</b>	50
Collectivism vs individualism <sup>b</sup>	80	60	<b>14</b>	76
Femininity vs masculinity <sup>c</sup>	<b>14</b>	64	46	70
Uncertainty avoidance <sup>d</sup>	53	<b>93</b>	48	<b>75</b>
Long-term vs short-term orientation <sup>e</sup>	67	<b>38</b>	62	61
Indulgence vs restraint <sup>f</sup>	<b>68</b>	29	38	30

Relatively high or low scores per dimension are printed in bold.

<sup>a</sup> The lower the score, the less power distant the culture, the higher the score the more power distant.

<sup>b</sup> The lower the score, the more collectivistic the culture, the higher the score the more individualistic.

<sup>c</sup> The lower the score, the more feminine the culture, the higher the score the more masculine.

<sup>d</sup> The lower the score, the less uncertainty avoiding the culture, the higher the score the more uncertainty avoiding.

<sup>e</sup> The lower the score the more short-term oriented the culture, the higher the score the more long-term oriented.

<sup>f</sup> The lower the score the more restraint the culture, the higher the score the more indulgent.

**Table 2**  
Participants' characteristics per country of origin.

	Dutch	Polish	Indonesian	Italian
	(n = 17)	(n = 16)	(n = 17)	(n = 17)
Average age, years (range)	36.1 (25–46)	34.9 (31–39)	33.8 (25–42)	37.5 (29–48)
Education lower than BSc, number	4	4	2	1
Education BSc or higher, number	13	12	15	16
Average number of children	2.1	1.8	1.8	1.3
1 child	5	5	7	12
2 children	6	10	7	5
3 children	5	1	3	0
4 children	1	0	0	0

### 2.3. Data analysis

The first author transcribed the interviews and qualitatively analyzed the data using the software program MAXQDA (version 12) by attaching codes to the mentioned values and value conflicts. The first author also developed the code labels. A second researcher in addition to the first author independently coded the interviews. After coding the interviews, they compared and discussed the assigned codes until consensus on the used codes was reached. After this, tables could be retrieved of the type and number of values and value conflicts the mothers experienced using the software program. As most values the mothers applied while providing a snack to their young children were comparable, these values could be easily grouped into the different categories of values (e.g. healthiness, balance/moderation, portion size).

While grouping the mentioned values of the mothers of the four cultures, it was seen that some values were comparable or related to each other. Therefore, we could define four key themes in which the related values could be easily grouped. These were the key themes including health-related, child-related, time-related and product-related values. The health-related key theme includes all values that are associated with the healthiness of the product or healthy behavior of the mothers. The child-related key theme includes all values that connects to the child, for example what the child prefers to snack, or the development of the child's taste. The time-related key theme includes the values convenience and making own food and the product-related key theme includes all values that are associated with the product itself. Only those values that were mentioned more than 5 times by at least one cultural group, are included in the key-themes.

### 3. Results

#### 3.1. Participant characteristics

The average age of the respondents was 35.6 years, ranging from 25 to 48 years. Most participants (84%) were higher educated with a bachelor's degree or higher. On average, the mothers had 1.7 children. Table 2 shows an overview of the demographic information of the mothers per country.

#### 3.2. Values in snack selection

Table 3 shows the values that arose during snack selection of the Dutch, Indonesian, Polish and Italian mothers for their young children. These values are categorized in the key themes health-related, child-related, time-related and product-related.

##### 3.2.1. Health-related values

A common view among the mothers of the four cultures is that healthiness was an important value in snack providing. Almost all mothers mentioned healthiness as a must have for a snack.

*"It needs to be nutritious and healthy"* [ID16: Dutch mother];

*"For snacks... it needs to be healthy, that's the most important"* [ID32: Polish mother].

However, further analysis of the sub-constructs of healthiness (Table 4) reveals a more nuanced picture. The Indonesian mothers

**Table 3**  
Values arising during snack selection of mothers for their young children per country.

Key themes	Values	Dutch (n = 17)	Polish (n = 16)	Indonesian (n = 17)	Italian (n = 17)
Health-related	Healthiness	<b>17</b>	<b>16</b>	<b>15</b>	<b>14</b>
	Balance / moderation	<b>15</b>	<b>12</b>	4	7
	Natural / fresh / organic	4	<b>11</b>	5	8
	Portion size	<b>10</b>	4	<b>9</b>	8
	Variety	<b>9</b>	5	4	<b>9</b>
Child-related	Child's preference	<b>12</b>	<b>14</b>	<b>16</b>	<b>17</b>
	Freedom for child / not forcing to eat	3	<b>9</b>	2	6
	Health status of child	6	4	8	6
	Development of taste	2	7	2	1
	Prevent hunger	4	6	5	1
Time-related	Convenience	<b>14</b>	7	<b>10</b>	7
	Making own food	0	<b>9</b>	6	4
Product-related	Religion <sup>a</sup>	0	0	<b>10</b>	0
	Price	<b>9</b>	7	6	5
	Brand	1	0	0	8
	Sustainability	6	1	0	1
	Packaging	4	2	3	5

Values mentioned by more than half of the mothers in a country are bold.

<sup>a</sup> Choice of snack is assigned by religion of the mothers.

**Table 4**  
Sub-constructs of the value healthiness.

Sub-constructs of value healthiness	Dutch (n = 17)	Polish (n = 16)	Indonesian (n = 17)	Italian (n = 17)
Healthy	12	15	9	11
Not too much sugar	8	7	6	6
Having good ingredients	9	6	4	4
Needs to give energy	5	5	3	9
No additives	3	4	1	5
Not too much salt	1	2	3	2
Not too much fat	2	0	0	0
Total	40	39	26	37

mention healthiness as an important value, but mention less often the specific sub-constructs belonging to healthiness. They just mention health, but specify this less often.

*“I also want a snack to be healthy”* [ID03: Indonesian mother];

*“I try to give a healthy snack, but it is hard”* [ID27: Indonesian mother].

The mothers of the other cultures are more specific in defining the health value. They mention many sub-constructs related to healthiness, often more than once.

*“It is important for me that a snack for my son does not contain a lot of sugar. So, not too much sugar, but also not too much salt and fat. It needs to be filling, but also low in calories”* [ID15: Dutch mother];

*“I choose to give vegetables or crackers because I think it is healthy, because they don't contain too much salt or too many additives, it is as natural as possible”* [ID55: Polish mother];

*“I really value healthy snacks, so natural flavors, natural coloring, safe origin of the ingredients and possibly organic”* [ID60: Italian mother].

Apparently, Indonesian mothers mentioned health often in relation with preference of the child, which was their number one value.

*“Something that is healthy, but they need to like it”* [ID50: Indonesian mother];

*“It needs to be healthy... I think potato chips”* [ID01: Indonesian mother].

It seems that the Indonesian mothers mention healthiness as a relevant value, but weigh it as less important when compared to the other mothers.

Balance / moderation, another value belonging to the key theme health-related (Table 3), is mostly mentioned by Dutch and Polish mothers and less often by Indonesian and Italian mothers.

*“And then... if they had three slices of cheese, I tell them it is enough for now”* [ID14: Dutch mother];

*“For me, balance is very important. There needs to be a balance between healthy and less healthy snacks. If there is a good balance it is not too bad if they sometimes eat unhealthy snacks”* [ID36: Polish mother].

Dutch and Italian mothers mentioned variety more often compared to Indonesian and Polish mothers (Table 3). Polish mothers mentioned portion size as a health-related value less often compared to the mothers from the other cultures. On the other hand, Polish mothers highly value snacks being natural, fresh or organic. Moreover, almost half of the Italian mothers mentioned these values, but Dutch and Indonesian mothers mentioned them less often.

*“I already helped my grandfather in the vegetable garden when I was a little girl. There was nothing in the shops, so you had to do it yourself. My grandfather still has a big vegetable garden, all organic. This I also want for my children”* [ID29: Polish mother];

*“For me it is important that a snack is healthy and natural, so something that is not processed”* [ID65: Italian mother].

### 3.2.2. Child-related values

The child's liking of the snack provided was very important for most mothers in this research, especially for the Indonesian and Italian mothers, who consider their child's preferences as most important when choosing a snack (Table 3). They stated that the child does not eat the snack if he does not like it, so in their opinion child's liking of the snack was a prerequisite for choosing it.

*“For me the snack needs to be healthy, at the same time it is clear that I realize that if the snack itself is not desirable he will not eat it at the end”* [ID60: Italian mother].

Indonesian mothers, compared to the mothers of the other cultures, were more often worried about the health status of their child, often related to weight or dental health.

*“From my culture in Indonesia, they always all like sweet snacks. That is causing the children in Indonesia all have the broken teeth, I think that is because of the sweet snacks and the rice. Yeah... that has also happen to my son, he has so many caries”* [ID02: Indonesian mother];

*“She has my genes, and I am not that skinny, neither my husband, so I want to avoid she get diabetes too”* [ID26: Indonesian mother].

For more than half of the Polish mothers it was important to “not force” their child to eat, so that they have the freedom to choose their preferred snacks. Besides, Polish mothers also mention more often that they value the taste development of their children. Mothers from the other countries do not mention these values as often as the Polish mothers do.

*“I do not want to force him to eat a specific snack”* [ID33: Polish mother];

*“Sometimes he does not like things, but then we agreed that he needs to taste. Then I try to give it to him several times and at the end, he likes it. Keep trying, but not forcing. Just try, just one bite and at the end he likes it”* [ID34: Polish mother].

The value preventing hunger is less mentioned by Italian mothers, compared to the mothers of the other countries.

### 3.2.3. Time-related values

The most mentioned value belonging to the key theme time-related is convenience (Table 3). The Dutch mothers highly value convenience; almost all Dutch mothers mention convenience as an important value when providing snacks to their young children, just after healthiness and balance/moderation.

*“For me it is important that it is quick to prepare. I would rather prepare a banana than I have to peel an apple and cut it in pieces. So for mothers it is important that it is easy and quick, knowing it is also healthy”* [ID17: Dutch mother].

**Table 5**

Frequency of value conflicts mothers from different cultures experience while providing snacks to their young children.

	Dutch (n = 17)	Indonesian (n = 17)	Polish (n = 16)	Italian (n = 17)
Health vs. child's preference	8	<b>14</b>	6	8
Health vs. convenience	<b>10</b>	2	4	2
Health vs. social environment	7	6	5	8
Health status of child vs. child's preference	1	6	2	1
Health vs. price	4	2	5	0

Values mentioned by more than half of the mothers in a country are bold.

Almost half of the Polish and Italian mothers, and more than half of the Indonesian mothers, mentioned convenience as an important value. The other value belonging to the key theme time-related is making own food. This value can be interpreted as the opposite of convenience. Especially Polish and Indonesian mothers highly value to make their own snacks, whereas Dutch mothers never mention this value.

*"Almost all food is homemade, I prefer to cut a salad myself instead of buying ready to use. I think it is not a problem to make food yourself, it takes not too much time"* [ID36: Polish mother];

*"Nowadays you can buy so many things in the store, that I think: you can make an effort and cook, but you just do not do that"* [ID14: Dutch mother].

### 3.2.4. Product-related values

A recurrent theme in the interviews, were values related to the properties of the snack like price, packaging, brand, religion and sustainability (Table 3). However, the mothers from the different cultures valued these characteristics differently. Compared to the other mothers, the Dutch ones stated more frequently the price of the snacks as a value. Brand is a value mentioned mostly by Italian mothers.

*"I choose the brand that is the best-known brand, it might suggest that the product is more reliable than others, maybe more controlled"* [ID59: Italian mother].

As some of the Indonesian mothers were religious, an important value in snack selection for them was religion. The Indonesian mothers were the only mothers of the four cultures mentioning religion.

*"I don't know in here, but in Indonesia especially for the Muslim community and for my family we always check the packaging, the ingredients, it needs to be Halal. So even if my daughter really likes to eat something, she knows she has to check the packaging"* [ID50: Indonesian mother].

Sustainability, the other value belonging to this key theme, was mainly mentioned by the Dutch mothers. Packaging was not an important value for all mothers.

### 3.3. Value conflicts in snack selection

When two important values do not serve the same goal, they can cause value conflicts. The mothers from the four cultural groups all reported these kind of conflicts between values, as presented in Table 5. Interestingly, all conflicts mentioned are related to health.

The most mentioned value conflict mothers experience while providing snacks, is the conflict between a healthy snack on the one side and the preference of the child on the other side. Mothers highly value the healthiness of the snacks; however, it is also important for them that their child likes the snack they provide. When these values are not in line, for example, when the child wants to eat chocolate or chips, value conflicts appear. Especially Indonesian mothers experience this type of conflict.

*"I need to fight with her, because she loves sweet things. I try everything for snacks with vegetables. I make carrot cake or carrot pie, or I make*

*spinach chips. But, if she sees green things she does not want it. That is really a challenge for me. Really difficult"* [ID26: Indonesian mother].

Polish mothers are stricter and are not willing to make compromises when a child complains or asks for an unhealthy snack. They mention the conflict between health and child's preference less often.

*"When he complains in terms of 'I am hungry and I want cookies' then yeah, it is just bad luck for him"* [ID54: Polish mother].

Interestingly, the mothers did not indicate social environment as a value, but when describing the value conflicts all mothers noticed the conflict between health and social environment (Table 5). In almost all cases, mothers are struggling with the provision of unhealthy snacks to their children by their husband or grandparents, or because other children get unhealthy snacks, which their children also want to have.

*"The grandparents give my children a lot of treats that I would definitely not give them. Like very sweet candies on which you can see the sugar on top"* [ID45: Dutch mother];

*"As far as my partner is concerned, he's a disaster. If there are packaged ice creams and snacks in our house, it's because he brings them. It's a fight!"* [ID58: Italian mother].

The Dutch mothers highly value both convenience and health, but these two values often conflict. They perceive healthy snacks as more time consuming and when there is a time restriction, they sometimes choose convenience over a healthier snack. For the mothers of the other cultures this was barely a problem.

*"Sometimes I just give him a bag of cookies, because it is quick and convenient, but of course I could also cut some fruit and give it to him, but at that moment time counts"* [ID13: Dutch mother].

The conflict between health status versus the preference of the child, is a conflict most reported by Indonesian mothers (Table 5). They highly value the preferences of their children, but also notice health problems with their children, like problems with their weight or their teeth. Because these two values are often contradictory, they experience value conflicts.

*"Yeah... because the little one has really bad teeth, so in the front almost 75% are black, with holes everywhere. Because she eats too much sweets. She likes to have ice cream for example. So I then choose to buy things that are easy to finish fast, let's say small cornets in 6 and then everyone get 1 and another 2 maybe for tomorrow"* [ID51: Indonesian mother].

The conflict between health and price is mostly experienced by the Dutch and Polish mothers. For Polish mothers, this is closely related to their high valuation of fresh and organic food, which is often more expensive.

## 4. Discussion

### 4.1. Cross-cultural comparison

Our study demonstrated that mothers with different cultural background reveal differences in values and value conflicts when choosing snacks for their young children. In the European continent, food



patterns differ according to the region one lives (Counihan and Van Esterik, 2012), thus the target was to gather participants from one country in the west, one country in the east and one country in the South of Europe. The inclusion of a country from Asia was preferred, because even more differences were expected. The results show many instances in which culture could have played a role. However, inherent to the character of qualitative research, the numbers of respondents and countries in the current study limit the claims that can be made about systematic differences due to cultural differences. Nevertheless, to get an indication whether cross-cultural differences might elucidate differences in values as indicated by the mothers, we discuss the results per key theme in the next paragraphs. Since our 4-country set involves variation on all six dimensions, these will be explained below. Note that these dimensions are about the social context in which people live and think, not about their personalities. Depending on culture, any behavior, including the giving of snacks to children, might take on a new meaning. For example are snacks given to show love, to feed a child, to care for a child's health or to be a good mother?

Power distance is associated with division of status in society between people with different attributes or roles. In family life, this has implications for status distribution between genders and ages, and between parents and children. The higher the score, the more parents expect obedience from their children, the lower the score, the more parents treat their children as equals. Individualism versus collectivism shows how individuals are related to groups. In individualistic cultures, individuals are expected to be independent from groups. They can change groups and belong to multiple groups. Moreover, individual taste, choice and initiative are seen as a good thing. In collective societies, life-long, loyal membership of a single in-group is the expectation. Masculinity versus femininity is about aggression, and about the emotional roles of men and women. When a culture is masculine, there are emotional and status inequalities between husband and wife, men are supposed to be forceful and to deal with facts, women with feelings, fathers are supposed to be more tough, mothers to be more caring. Uncertainty avoidance is the extent to which the members of a culture feel threatened by anything unknown. This includes relations, situations, people but also foods and snacks. Conversely, familiar things are valued more, and linked to strong emotions. In strongly uncertainty avoidant cultures, there are tight rules for children on what is good and on what is taboo, and this includes food and rituals around food. Long-term orientation is the extent to which society is oriented towards future rewards or obligations, as opposed to momentary ones. In a long-term oriented culture, balance, thrift and moderation are typically valued, and traditions can be adapted to context. Finally, indulgence stands for freedom of acting on one's impulses, enjoyment of life, and having fun. In indulgent societies, life should be easy and pleasurable (Hofstede et al., 2010).

All mothers, independent of their culture, mentioned healthiness as an important value in snack providing (Table 3). From literature, we also know that mothers from various countries value health in food choice (Bouwman et al., 2009; Johnson et al., 2011; Carnell et al., 2011; Machín et al., 2016). However, when further exploring this health value, our data suggests that the Indonesian mothers value health less than the mothers with the other nationalities do. Apparently, in addition to health as value, they seem to value the mother-child relation, as indicated by their high scores on the child-related key theme (Table 3). Prioritizing a relational over an individual theme could be related to the high score on collectivism of the Indonesian culture. Where the European mothers value teaching their children to be independent, the focus of Indonesian mothers is more on the needs and desires of their child. The focus on needs, goals and desires caused by the social context is also described by Parkinson et al. (2005). This might result in the pampering of their children with foods they love to eat, which are maybe less healthy. Likewise, Tan, van der Beek, Kuznesof & Seal (2016) found, in a study about the perception and understanding of mothers of health claims on milk powder for children that Indonesian

mothers did not care a lot about these health claims, as long as their children were happy. Another notable result belonging to the health-related key theme is the high score of the Polish mothers, and to a lower extent of the Italian mothers, on the value natural / fresh / organic (Table 3). The dimension scores reveal that Polish, as well as Italian cultures score high on uncertainty avoidance. De Mooij (2010) described that in strongly uncertainty avoiding cultures, there seems to be more fear of contamination. People seek for health in the purity and quality of their foods (De Mooij, 2010), which may explain the scores on natural / fresh / organic in our study. Moreover, Markovina et al. (2015) reported the importance of natural content as an important food choice motive of Polish consumers.

All mothers, but especially the Indonesian and Italian mothers, mention the child's preference as important (Table 3). These findings are in line with studies done in the USA (Evans et al., 2011; Meers et al., 2016), Australia (Russell et al., 2015; Boak et al., 2016) and UK (Carnell et al., 2011), which revealed that children's preference affected mothers' food choice. Particularly, in the current study, Polish mothers mentioned frequently freedom of the child as a value. According to the cultural dimensions the Polish culture has a comparatively large power distance and strong restraint, but is not so high on individualism (Table 1). These cultural characteristics could indicate that in Poland freedom is an ideal situation that can never be taken for granted.

The time-related key theme includes the values convenience and making own food. In our study, Dutch mothers highly value convenience. Likewise, Dutch consumers, in the research of Markovina et al. (2015), highly valued convenience. Of the mothers from the four cultures studied, the Dutch ones most often mentioned the conflict between health and convenience. According to the De Mooij, (2010), convenience as a motive for food choice associates with low uncertainty avoidance and low masculinity, which definitely fits Dutch culture, which is feminine, long-term oriented and not very uncertainty avoiding. The Polish and the Italian cultures score high on uncertainty avoidance (respectively 93 and 75), as well as on masculinity (respectively 64 and 70), which could explain their lower scores on convenience. Making own food reveals the mother's care for and time investment in their young children. This value is mentioned by the Polish and Indonesian mothers, and could be linked to more collectivist cultures, with their strongly scripted social roles. Additionally, food safety concerns could play a role in the high scores of the Polish and Indonesian mothers on making own foods. When making your own food you control what is in the food yourself, which is a determinant of high uncertainty avoidance, a dimension on which the Polish as well as the Italian cultures score high. It was expected that the Italian mothers would mention more often to make their own food, however this was not the case. A reason could be that this research is focusing on snacks, and not on the main meals which may be more often prepared from scratch by the Italian mothers.

Product-related values assigned by the mothers also differed between the four nationalities. The Dutch mothers highly value price for snack products, as was also found by Markovina et al. (2015). The importance of price may be explained by the dimension of long-term orientation, for which the Dutch culture scores highest of the four cultures in this research. In the Dutch culture, it is important to look at the future and not spend all the money at once. The Dutch mothers also stated sustainability more often than the mothers of the other countries did, which could also be interpreted as caring for the future. While providing a snack, religion is mentioned as an important value by the Indonesian mothers (Table 3). The Indonesian mothers mention that the snacks they provide need to be Halal, which is also reported by Tan et al. (2016) as an important value for Indonesian mothers. One could directly attribute this to religion. However, choice of religion, and the way in which it is enacted is modified by culture (Hofstede et al., 2010). High collectivism, as the Indonesian culture, makes it more likely that food rituals are shared and seen as linked to the group's identity. Based on a cross-cultural study about food preferences, Osinga and Hofstede

(2004) conclude that in essence not religion in itself, but the culture in which that religion grew, matters in food choice.

For Italian mothers, brand is an important value, which is also seen in the research of Mascarello et al. (2015) were Italian consumers highly value taste and naturalness of food products, but also mention brand as important. In our study, the Italian mothers scored high on the value brand (Table 3). Italy scores relatively high on the dimension uncertainty avoidance of the Hofstede model (Table 1). A characteristic of strongly uncertainty avoiding cultures is that familiar things are valued more and that members of these cultures feel threatened anything unknown, including foods. This might explain the higher valuing of brand by the Italian mothers in our study, as well-known brands are seen as familiar and safe to them. Similarly, Tiozzo et al. (2017) stated that Italians often do not trust the foods they eat. Another characteristic of the Italian culture is the relative high score on masculinity, in which status is seen as important. This may be an explanation too, as you can show off by using specific brands.

Although these results and interpretations are presented with caution due to the explorative nature of this study, they do indicate that national culture, as operationalized in Hofstede dimensions, is a meaningful framework for explaining values as well as value conflicts in snack giving behavior of mothers. As a result, different motives, and different value conflicts may be at work when mothers are providing snacks to their young children. If this analysis applies, it is expected that mothers from countries with comparable dimension scores as the mothers from the countries in this study, will mention the same values as important in snack giving and experience similar value conflicts. For example, mothers from the Scandinavian countries like Norway and Sweden are expected to experience comparable values and value conflicts as the Dutch mothers do. Therefore, the insights of this study help conjecture how the results could be extrapolated to other countries. These insights could be of relevance for food companies to better target their product development for consumers of different cultural backgrounds, which can be of added value (De Mooij, 2010). This data could also help national health care institutes to draw up more effective recommendations on children's diet in order to face the obesity epidemic. Besides, this research is of relevance for other researchers in cultural and social science.

#### 4.2. Research considerations and recommendations

This study described the values and value conflicts of mothers of four different cultures when providing snacks to their young children. The original idea for the set-up of this study was to conduct focus group discussions instead of semi-structured interviews as it was believed that this technique would give more, or other information about the topic as the participants could brainstorm and exchange ideas. Regrettably, many mothers, and especially Dutch mothers, were not comfortable to join focus group discussions regarding their snack giving behavior and experienced value conflicts. They were afraid to be judged by the other mothers about their specific decisions and value conflicts. This has methodological implications. This issue shows that the topic is both very relevant and sensitive. It also shows that focus group discussion is maybe a desirable method, but hard to realize for more sensitive experienced topics. The mothers in this study were mainly highly educated. As education has an influence on the snack giving behavior and its considerations of Dutch mothers (Damen et al., 2018), this can be the case for mothers with other cultural backgrounds as well.

This explorative study on values and value conflicts of mothers of different cultures demonstrated that all mothers experience health-related value conflicts when providing snacks to their young children. However, the type of values that conflict with health differ between the cultures. Mothers of different cultures also report different values playing a role while providing a snack to their young children. Dutch mothers highly value health and convenience. Polish mothers value health and organic and natural snacks. Italian mothers highly value the

preference of their child and the brand of the snack. Indonesian mothers highly valued the preference of their child as well as religion. To further explore the topic, it is recommended to conduct the study in more different countries to ascertain which health-related value conflicts of mothers of other cultures experience, which values are relevant for these mothers and how they can be connected to the cultural differences among countries.

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